IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application:

1-26. (Canceled)

27. (Currently amended) A machine-implemented method for a storage system to transmit an IP packet over a Fibre Channel (FC) network, the method comprising:

accessing an FC name server database in response to a request for a connection over the FC network with a destination IP address;

discovering an FC network address corresponding to the destination IP address by searching a plurality of subfields in the FC name server database according to ~~predefined priorities for~~ positions of the plurality of subfields, the FC name server database comprising a master field for a master storage server and a failover field for a failover storage server for the master storage server, wherein the master and failover fields are each partitioned into first and second subfields, the second subfield of the failover field stores an IP address for the master storage server if the master storage server fails, and wherein the second subfields are searched prior to searching the first subfields;

establishing the connection over the FC network using the discovered FC network address; and

transmitting the IP packet using the established connection over the FC network.

28. (Canceled)

29. (Currently amended) A machine-implemented method as recited in claim 27, wherein discovering the FC network address corresponding to the destination IP address comprises:

obtaining from an FC name server a plurality of values for ~~a field in the FC name server database, wherein the field contains~~ the plurality of subfields;

searching the plurality of values ~~for the field based on the predefined priorities~~ until finding a match with the destination IP address; and

obtaining from the FC name server the FC network address corresponding to a value for a subfield of the plurality of subfields~~the field~~, which has the match with the destination IP address.

30. (Previously presented) A machine-implemented method as recited in claim 27, wherein the plurality of subfields are positioned in a symbolic node name field of the FC name server database.

31. (Currently amended) A machine-implemented method for a storage system to transmit an IP packet over a Fibre Channel (FC) network, the method comprising:

querying an FC name server for the FC network to retrieve a symbolic node name field from an[[the]] FC name server database;

receiving from the FC name server a plurality of values for the symbolic node name field;

searching the plurality of values for a[[the]] destination IP address according to ~~predefined priorities for a plurality of partitions~~ positions of a plurality of subfields in the symbolic node name field ~~until finding a match with the destination IP~~, the FC name server database comprising a master field for a master storage server and a failover field for a failover storage server for the master storage server, wherein the master and failover fields are each partitioned into first and second subfields, the second subfield of the failover field stores an IP address for the master storage server if the master storage server fails, and wherein the second subfields are searched prior to searching the first subfields;

obtaining from the FC name server an[[the]] FC network address corresponding to ~~a value for the symbolic node name field, which has the match with~~ the destination IP address;

establishing the connection over the FC network using the obtained FC network address; and

transmitting the IP packet using the established connection over the FC network.

32. (Currently amended) A machine-implemented method as recited in claim 31, wherein ~~the symbolic node name field includes two partitions, and~~ searching the plurality of values for the symbolic node name fields comprises:

searching the second subfields of the master and failover fields ~~values for a first partition of the two partitions~~ for the destination IP address; and

searching the first subfields of the master and failover fields ~~values for a second partition of the two partitions~~ if no match has been found with the destination IP address in the second subfields~~first partition~~.

33. (Currently amended) A machine-implemented method as recited in claim 31, wherein obtaining from the FC name server the FC network address comprises querying the FC name server to retrieve the FC network address corresponding to a subfield of the plurality of subfields~~a value for the symbolic node name field~~, which has the match with the destination IP address.

34. (Currently amended) A storage system for transmitting an IP packet over a Fibre Channel (FC) network, the storage system comprising:

a processor;

a network adapter coupled to the processor to connect the storage system to the FC network; and

a memory coupled to the processor to store program code, which when executed by the processor, cause the processor to perform a method comprising:

accessing an FC name server database in response to a request for a connection over the FC network with a destination IP address;

discovering an FC network address corresponding to the destination IP address by searching a plurality of subfields in the FC name server database according to ~~predefined priorities for~~ positions of the plurality of subfields, the FC name server database comprising a master field for a master storage server and a failover field for a failover storage server for the master storage server, wherein the master and failover fields are each partitioned into first and second subfields, the second subfield of the failover field stores an IP address for the master storage server if the master storage server fails, and wherein the second subfields are searched prior to searching the first subfields;

establishing the connection over the FC network using the discovered FC network address; and

transmitting the IP packet using the established connection over the FC network.

35. (Canceled)

36. (Currently amended) A storage system as recited in claim 34, wherein discovering the FC network address corresponding to the destination IP address comprises:

obtaining from an FC name server a plurality of values for a field in the FC name server database, wherein the field contains the plurality of subfields;

searching the plurality of values for the field ~~based on the predefined priorities~~ until finding a match with the destination IP address; and

obtaining from the FC name server the FC network address corresponding to a value for the field, which has the match with the destination IP address.

37. (Previously presented) A storage system as recited in claim 34, wherein the plurality of subfields are positioned in a symbolic node name field of the FC name server database.

38. (Currently amended) A storage system for transmitting an IP packet over a Fibre Channel (FC) network, the storage system comprising:

a processor;

a network adapter coupled to the processor to connect the storage system to the FC network; and

a memory coupled to the processor to store program code, which when executed by the processor, cause the processor to perform a method comprising:

querying an FC name server for the FC network to retrieve a symbolic node name field from an[[the]] FC name server database;

receiving from the FC name server a plurality of values for the symbolic node name field;

searching the plurality of values for a[[the]] destination IP address according to ~~predefined priorities for~~positions of a plurality of subfields in[[of]] the symbolic node name field ~~until finding a match with the destination IP~~, the FC name server database comprising a master field for a master storage server and a failover field for a failover storage server for the master storage server, wherein the master and failover fields are each partitioned into first and second subfields, the second subfield of the failover field stores an IP address for the master storage server if the master storage server fails, and wherein the second subfields are searched prior to searching the first subfields;

obtaining from the FC name server an[[the]] FC network address corresponding to ~~a value for the symbolic node name field, which has the match with~~ the destination IP address;

establishing the connection over the FC network using the obtained FC network address; and

transmitting the IP packet using the established connection over the FC network.

39. (Currently amended) A storage system as recited in claim 38, wherein ~~the symbolic node name field includes two partitions, and~~ searching the plurality of values for the symbolic node name fields comprises:

searching the second subfields of the master and failover fields ~~values for a first partition of the two partitions~~ for the destination IP address; and

searching the first subfields of the master and failover fields ~~values for a second partition of the two partitions~~ if no match has been found with the destination IP address in the second subfields~~first partition~~.

40. (Currently amended) A storage system as recited in claim 38, wherein obtaining from the FC name server the FC network address comprises querying the FC name server to retrieve the FC network address corresponding to a subfield of the plurality of subfields~~a value for the symbolic node name field~~, which has the match with the destination IP address.

41. (Currently amended) A machine-readable medium to store program code, which when executed by a processor, cause the processor to perform a method for transmitting an IP packet over a Fibre Channel (FC) network, the method comprising:

accessing an FC name server database in response to a request for a connection over the FC network with a destination IP address;

discovering an FC network address corresponding to the destination IP address by searching a plurality of subfields in the FC name server database according to ~~predefined priorities for~~ positions of the plurality of subfields, the FC name server database comprising a master field for a master storage server and a failover field for a failover storage server for the master storage server, wherein the master and failover fields are each partitioned into first and second subfields, the second subfield of the failover field stores an IP address for the master storage server if the master storage server fails, and wherein the second subfields are searched prior to searching the first subfields;

establishing the connection over the FC network using the discovered FC network address; and

transmitting the IP packet using the established connection over the FC network.

42. (Canceled)

43. (Currently amended) A machine-readable medium as recited in claim 41, wherein discovering the FC network address corresponding to the destination IP address comprises:

obtaining from an FC name server a plurality of values for ~~a field in the FC name server database, wherein the field contains~~ the plurality of subfields;

searching the plurality of values ~~for the field based on the predefined priorities~~ until finding a match with the destination IP address; and

obtaining from the FC name server the FC network address corresponding to a value for a subfield ~~the field~~, which has the match with the destination IP address.

44. (Previously presented) A machine-readable medium as recited in claim 41, wherein the plurality of subfields are positioned in a symbolic node name field of the FC name server database.

45. (Currently amended) A machine-readable medium to store program code, which when executed by a processor, cause the processor to perform a method for transmitting an IP packet over a Fibre Channel (FC) network, the method comprising:

querying an FC name server for the FC network to retrieve a symbolic node name field from an[[the]] FC name server database;

receiving from the FC name server a plurality of values for the symbolic node name field;

searching the plurality of values for a[[the]] destination IP address according to ~~predefined priorities for~~positions of a[[the]] plurality of subfields in[[of]] the symbolic node name field ~~until finding a match with the destination~~, the FC name server database comprising a master field for a master storage server and a failover field for a failover storage server for the master storage server, wherein the master and failover fields are each partitioned into first and second subfields, the second subfield of the failover field stores an IP address for the master storage server if the master storage server fails, and wherein the second subfields are searched prior to searching the first subfields;

obtaining from the FC name server an[[the]] FC network address corresponding to ~~a value for the symbolic node name field, which has the match with~~ the destination IP address;

establishing the connection over the FC network using the obtained FC network address; and

transmitting the IP packet using the established connection over the FC network.

46. (Currently amended) A machine-readable medium as recited in claim 45, wherein ~~the symbolic node name field includes two partitions, and~~ searching the plurality of values for the symbolic node name fields comprises:

searching the second subfields of the master and failover fields ~~values for a first partition of the two partitions~~ for the destination IP address; and

searching the first subfields of the master and failover fields~~values for a second partition of the two partitions~~ if no match has been found with the destination IP address in the second subfields~~first partition~~.

47. (Currently amended) A machine-readable medium as recited in claim 45, wherein obtaining from the FC name server the FC network address comprises querying the FC name server to retrieve the FC network address corresponding to a subfield of the plurality of subfields~~a value for the symbolic node name field~~, which has the match with the destination IP address.